FEDERAL COMMUNICATIONS COMMISSION

MASS MEDIA BUREAU
POLICY AND RULES DIVISION
WASHINGTON, D.C. 20554

REVIEW OF THE RADIO INDUSTRY, 1997
MM Docket No. 98-35

March 13, 1998

EXECUTIVE SUMMARY

On February 8, 1996, President Clinton signed into law the Telecommunications Act of 1996 ("Telecom Act"). This law directed the FCC to revise Section 73.3555 of our Rules (47 C.F.R. §73.3555) to eliminate the national multiple radio ownership rule and relax the local ownership rule. In an *Order* adopted March 7, 1996, we implemented these provisions of the Telecom Act. This report examines changes in various aspects of the commercial broadcast radio industry subsequent to the implementation of these provisions of the Telecom Act. The data examined from March, 1996 through November, 1997 suggest significant changes have occurred in ownership and performance.

At a national level, approximately 2.5 percent more commercial radio stations have started broadcasting. However, the number of owners of commercial radio stations has declined by 11.7 percent. This decline is primarily due to mergers between existing owners. The result of these mergers has been to change the ranking and composition of the top radio station owners.

At a local level, there has been a downward trend in the number of radio station owners in Arbitron Metro markets. Further, the top owners in each Metro market generally account for an increasing share of the total radio advertising revenues in these markets. However, there does not appear to be any downward trend in the variety of radio formats available to consumers in these markets. Acquiring radio companies appear to have pursued format diversification, rather than format concentration strategies.

At the industry level, publicly traded companies whose primary business is radio broadcasting are experiencing robust financial performance. While their profit margins have varied, this is largely a result of their significant debt loads. Despite their high debt loads, they are generating sufficient cash as to mitigate concerns over their financial health. This health is reflected in stock returns better than those of the typical S&P 500 company. The market's valuation of radio companies suggests that the market is foreseeing future earnings growth in this industry. The observed consolidation of the radio industry appears to have had positive financial consequences for these radio companies.

1. Overview

On February 8, 1996, President Clinton signed into law the Telecommunications Act of 1996 ("Telecom Act"). This law directed the FCC to revise our Rules (47 C.F.R. §73.3555) concerning the national multiple radio ownership rule and the local ownership rule to conform with the provisions of the Telecom Act. These provisions first required that the Commission eliminate any provisions that limted the number of AM and FM stations that one entity could own or control on a nationwide basis. Next, these provisions required that the Commission relax its local ownership rules such that:

a. In a radio market with 45 or more commercial radio stations, an entity would be allowed to own, operate, or control up to 8 with not more than 5 in the same service.

b. In a radio market with between 30 and 44 commercial radio stations, an entity would be allowed to own, operate, or control up to 7 with not more than 4 in the same service.

c. In a radio market with between 15 and 29 commercial radio stations, an entity would be allowed to own, operate, or control up to 6 with not more than 4 in the same service.

d. In a radio market with 14 or fewer commercial radio stations, an entity would be allowed to own, operate, or control up to 5 with not more than 3 in the same service, subject to the limitation that no entity be allowed to own, operate, or control more than 50% of the stations in these markets.

In an *Order* adopted March 7, 1996 (FCC96-90), the Commission implemented these provisions of the Telecom Act of 1996. These new rules reflect Congress' intent that the Commission substantially relax its radio ownership rules.

This report presents an overview of the commercial radio broadcast industry since implementation of the above provisions of the Telecom Act as it has been almost two years since the new rules allowed further consolidation of the radio industry. Unless otherwise indicated, all data in this report refer only to commercial radio stations. Further, this report uses publicly available information gathered from BIA Publications' MasterAccess Radio Analyzer database and Standard & Poor's Computstat database to examine changes in the radio industry between March, 1996 and November, 1997.

This report is organized into three parts. The first part, reported in Section 2, examines

changes in the radio industry from a national viewpoint. In other words, we describe broad changes to the radio industry. Next, in Section 3, we examine changes in the radio industry at the local level. Specifically, we examine various indicia of diversity and concentration in each of the areas that Arbitron identifies as a local radio market. Finally, in Section 4, we compare the financial performance of several publicly traded radio companies to firms in the S&P 500 with a view to revealing something about the financial performance of the radio industry.

2. Changes in the Radio Industry - A National View

Since the passage of the Telecom Act, there has been an increase of about 2.5 percent in the number of commercial radio stations. As of November, 1997, there are over 10,470 commercial radio stations in the United States.[1] Of these, about 54 percent (5,656) are FM stations and 46 percent (4,819) are AM stations. All the growth in stations since passage of the Telecom Act has been in FM stations. While the number of radio stations has grown, the number of radio owners has declined by 11.7 percent since March, 1996. As of November, 1997, there were 4,507 owners of radio stations across the nation.

The decline in the number of owners reflects a consolidation of the radio industry that is the result of a tremendous amount of trading in radio stations. We note that in the first year of the Telecom Act, 2066 radio stations changed owners (about 20 percent of the total number of stations).[2] In contrast, in the twelve month period prior to the Telecom Act, 988 radio stations

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[1] The number of noncommercial FM stations increased from 1,828 in March, 1996 to 1,912 in November, 1997 (an increase of 4.6 percent). More detailed information on stations and owners is contained in Appendices A-E, and G. In particular, Appendix A is a summary of the changes in actual numbers of stations and owners. In calculating the number of owners, we included, as completed, all pending radio sales as reported in BIA data. Thus, the decline in the number of owners between March, 1996 and November, 1997 would have been greater had the March, 1996 ownership data excluded pending sales. We also attributed the ownership of stations joined by an LMA to the owners with the larger national revenues. See Appendix D for the number of stations attributed to each owner solely through LMAs.

[2] Of these ownership changes, 766 (37 percent) are pending FCC approval as of February, 1997.

changed owners.[3] As a result of this trading activity, we observe that there are now 32 radio station owners with over 20 stations.[4] Consequently, there has been a significant increase in the number of large group owners since March, 1996. Further, there have been changes in the composition of the top 50 radio group owners, reflecting mergers between companies that were among the top 50 radio owners.[5] Thus, the decline in the number of owners of radio stations nationally reflects mergers or acquisitions between existing owners that has resulted in more large radio group owners.

3. Changes in the Radio Industry - A Local View

While these broad national trends are interesting, they do not indicate whether they are typical of a variety of local radio markets, or simply reflect changes in a few local radio markets. Radio stations are generally limited in their signal reach and so largely serve local areas. Thus, we focus now on changes in the radio industry reflected in data at the Arbitron Metro level.[6] Arbitron has delineated 265 different local geographic areas, or Metros, to reflect the audiences reached by local radio stations.[7] Arbitron Metros generally correspond to Metropolitan Statistical Areas as defined by the U.S. Government Office of Management and Budget.[8] About

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[3] The March, 1995 to February, 1996 count of 988 does not include any of the 278 trades in February, 1996.

[4] See Appendix B. Our rules prior to the Telecom Act generally limited multiple radio ownership to a maximum of 20 stations.

[5] See Appendix C. Note that the March, 1996 data include those transactions that were announced before the effective date of the Commission's new rules implementing the Telecom Act. Thus, several of the radio stations attributed to Bonneville and Viacom in March, 1996, for example, r ect pending or "proposed" transactions.

[6] Arbitron is a nationally recognized radio audience research firm.

[7] Arbitron Metro markets do not necessarily correspond to the Commission's definition of a radio station's market for the purposes of applying the Commission's radio ownership rules.

[8] Bureau of the Census, *Geographic Areas Reference Manual*, November 1994, Chapter 13, pp. 1-13. Generally, a Metropolitan Statistical Area consists of one or more counties that contain a city of 50,000 or

one-half of all commercial radio stations are licensed to communities in the 265 markets.[9] The 265 radio markets consist of more than 800 counties and represent more than one-fourth of all counties in the U.S.[10] More than three-fourths of the U.S. population of at least 12 years of age reside in the 265 radio markets.[11]

This delineation of a local radio market has value for buyers and sellers of radio advertising, but it may be misleading for the purposes of understanding competition in local advertising markets. Advertisers wishing to reach a local "market" might use radio advertising, or they may use television advertising, or newspaper advertising, or billboards, or any of a number of other alternatives. Consequently, changes in the concentration of the radio industry at the local level may or may not reflect increased concentration in the local advertising market.

We do not address, in this report, the issue of what are the relevant substitutes to radio advertising. Rather, we focus upon changes in the radio industry in the different local markets according to which advertisers buy and sell time on radio. This view is appropriate since we are simply concerned with profiling changes in the radio industry locally, rather than changes in local advertising markets.

Finally, note that all figures displayed in this section represent "smoothed" lines rather than the actual data. Smoothing is a statistical technique used to illustrate or reveal trends in the data. A line representing the actual data would be filled with jagged ups and downs, much like the representation of an earthquake on a seismograph. Such a representation would make it extremely difficult to discern a trend in the data. On the other hand, a smoothed line uses averaging to blunt the jagged ups and downs of the actual data and to reveal any underlying

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more inhabitants, or contain a Census Bureau-defined urbanized area with a total population of at least 100,000.

[9] The BIA data base indicates that more than 53 percent of all commercial stations are in Arbitron's 265 radio markets.

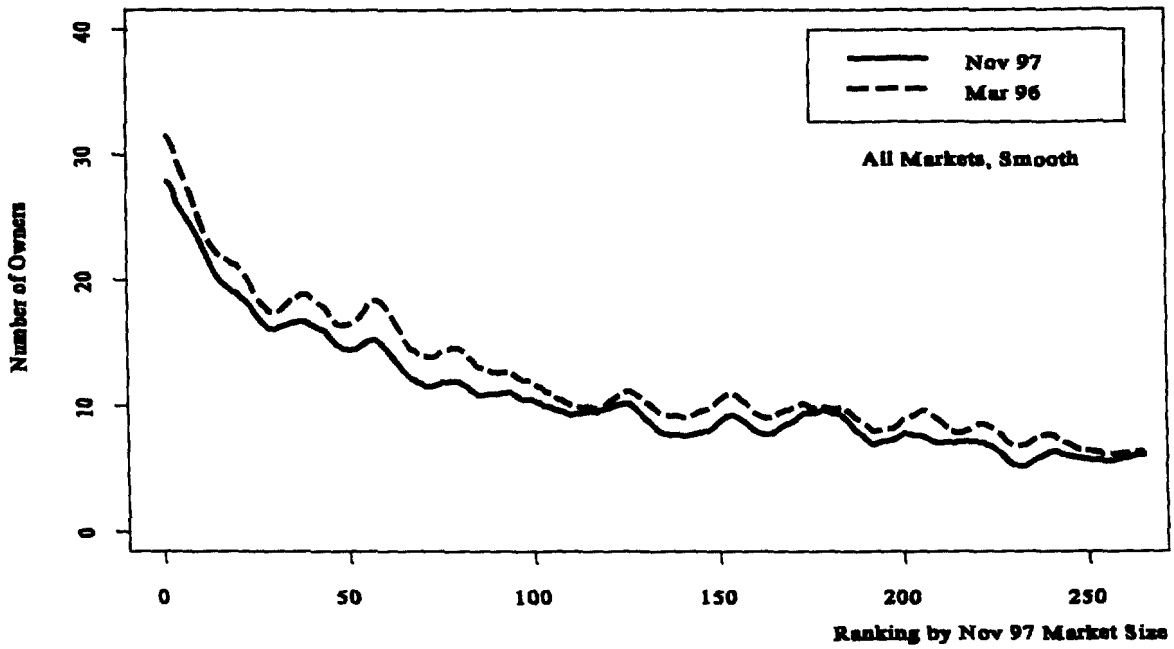
[10] There are 3,127 counties and independent cities in the U.S. The 813 counties (including portions of counties) and independent cities in the Arbitron Metros make up 26 percent of all counties and independent cities.

[11] Arbitron's 265 markets represent about 77 percent of the U.S. population for those at least 12 years of age. Arbitron does not measure radio listening statistics for those under age 12.

trends. A point on a smoothed line represents a weighted average of the actual data in an interval around that point.[12] In the figures below, the broken line represents data from March, 1996 and the solid line represents data from November, 1997. The difference in the two lines represents general changes in the radio industry since the passage of the Telecom Act. Because the points on the lines are averages, the reader should not attempt to use these figures to make specific market to market comparisons.

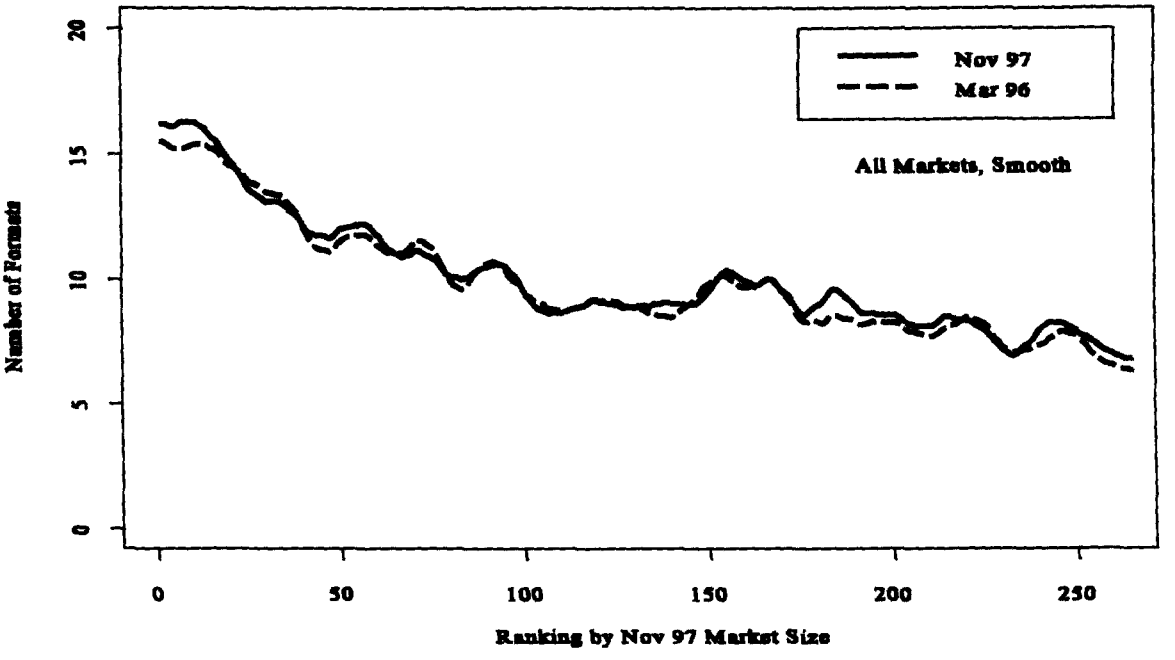
[12] For market 100, for example, the smoothed line will show a weighted average of the actual data in markets 90 to 110. The data from market 100 gets the most weight, data from markets 99 and 101 get the next most weight, and so forth. In particular, the weights are determined by a standard triangular "kernel." For more information about non-parametric regression (smoothing) see: Manski, C. F., March 1991, "Regression," *Journal of Economic Literature* XXIX: 34 - 50, and Härdle, W., 1989, Applied Nonparametric Regression, Cambridge: Cambridge University Press.

3.1 Changes in Ownership Diversity



Traditionally, one measure of diversity that is of interest to the Commission is the number of independent owners of radio stations in a local market. The above figure depicts changes in the number of owners by Metro market area. This figure reveals that the decline in the number of radio owners nationally reflects a general trend across Metro markets, and is not simply the result of consolidations in a few large or small markets. This figure also illustrates that the number of owners declines as the market gets smaller.

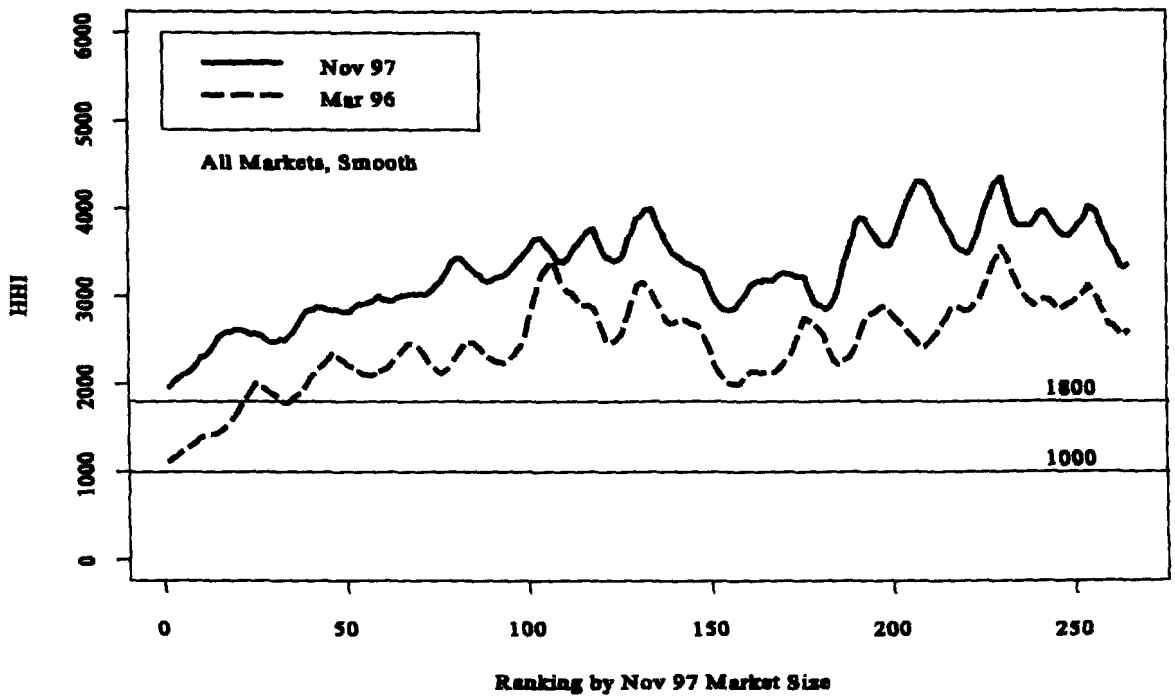
3.2 Changes in Format Diversity



Another dimension of diversity that the Commission is concerned with is program diversity. Program diversity is reflected, at least in part, by the number of distinct radio formats available in each Metro market. The above figure presents information on the number of distinct radio formats for each Metro market and suggests that there has been no trend toward change in the diversity of radio programming available to consumers.[13] This figure also illustrates that the number of formats decline as the market gets smaller.

[13] The data on the number of different types of formats per market is based on information in the BIA Radio Database. BIA obtains specific format information from the radio stations it surveys, sorting their responses into broad format categories. The categories were Adult Contemporary, Album Oriented Rock/Classic Rock, Classical, Contemporary Hit Radio/Top 40, Country, Easy Listening/Beautiful Music, Ethnic, Jazz/New Age, Middle of the Road, Miscellaneous, News/Sports, Nostalgia/Big Band, Oldies, Religion, Rock, Spanish, Talk, Urban, Dark (not on air), No format reported.

3.3 HHI by Metro Market



Separate from ownership and program diversity, the Commission has traditionally shown an interest in the economic concentration of existing competitors. A standard measure of economic concentration is the Herfindahl-Hirschman Index (HHI).[14] We calculate the HHI for each Metro market using radio station revenues and display the "smoothed" results in the above figure. Notice that as the size of the market decreases, HHI's generally increase. In addition, the figure suggests that there was a general trend towards increased economic concentration across Metro market. In other words, fewer owners are generally earning a larger percentage of the

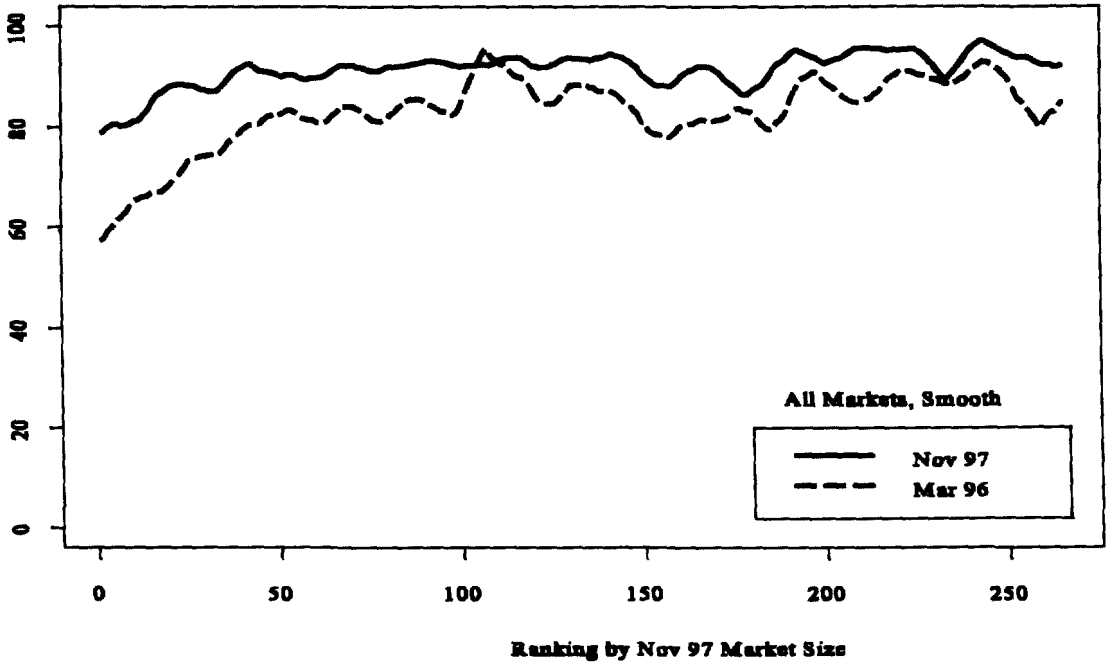
[14] HHIs are calculated by summing the square of each radio owner's percentage of the Metro market revenue. We have calculated these HHIs according to the principles set out in the Department of Justice's "Horizontal Merger Guidelines", but do not suggest that we have calculated these measures exactly as the Department of Justice does in its review of specific radio mergers. According to the Department of Justice's "Horizontal Merger Guidelines", mergers resulting in HHIs of less than 1000 do not generally warrant concern, mergers resulting in HHIs between 1000 and 1800 warrant some concern, and mergers resulting in HHIs over 1800 warrant scrunity.

revenue in their Metro market.[15]

[15] Appendix E summarizes Appendix G which, among other things, contains our measurements of revenue concentration for the Metro markets. BIA estimates both station and market revenues. Due to the difficulty of defining a Metro market and then assigning stations to a unique Metro market, there are some discrepancies between the Metro market revenue and the sum of the station revenues for stations in the Metro market. In some cases, there are out-of-Metro market stations that nevertheless earn a share of the Metro market revenue. Or, in some cases there are in-Metro market stations that earn a share of their revenue outside of their Metro market. In either case, the Metro market revenue will be different than the sum of the station revenue for stations home to the Metro market. Because in the majority of cases the difference is small or zero, we simply defined the station's Metro market share as its revenue divided by the Metro market revenue. Thus, an individual Metro market's HHI may be higher or lower than the underlying HHI.

The data in Appendices E and G include proposed or "pending" transactions. Thus, the decline in the number of owners as well as the increase in the HHI and CR4 between March, 1996 and November, 1997 would have been more pronounced had the March, 1996 ownership data excluded pending sales. In other words, the data in these appendices under-estimate the impact of the Telecom Act on consolidation of the radio industry thus far. Note, for example, in Appendix G that the HHI in the Dallas-Ft. Worth radio metro market increased slightly. This is because the post-Telecom Act radio acquisitions of Infinity and CBS are attributed to them in March, 1996 and November, 1997. Or for another example, the HHI in the Cincinnatti radio metro market is reported as declining over this period. This is largely due to the fact that Jacor's post-Telecom Act proposed transaction involved a larger number of radio stations in Cincinnatti than they were permitted to acquire.

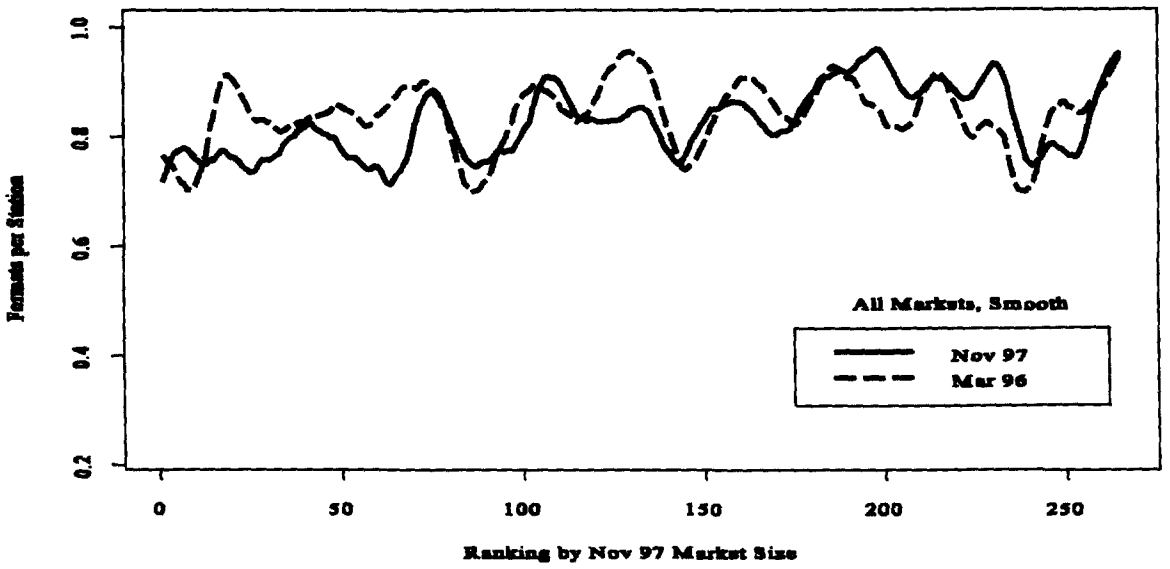
3.4 Changes in the Revenue Share Earned by the Metro's Top Four Owners



This trend of fewer owners generally earning a larger percentage of market revenue is further emphasized by looking at the revenue share of the top four owners in the Metro market (i.e., the four-firm concentration ratio).[16] The figure shows that the revenue share has generally risen across Metro markets. By November, 1997, the top four radio owners generally account for about 90 percent their Metro market's total revenues. Further, the figure suggests that the percentage is generally higher in the smaller Metro markets.

[16] A four firm concentration measure is a standard alternative to the HHI measure as a measure of market concentration. The four firm concentration is frequently used because of its ease of interpretation, ease of calculation, and lesser data requirements. See D. Waldman and E. Jensen, *Industrial Organization: Theory and Practice*, Addison-Wesley (1998) for further discussion of concentration measures.

3.5 Changes in Formats per Station for the Top Owner



As owners have acquired more stations, it has been argued that they are concentrating on particular formats. An owner might concentrate on a particular format in order to dominate access to the audience who listens to that format. Then, advertisers who want to reach that audience could be forced to pay a higher advertising rate. The higher rate could then lead to higher owner profits.

The above figure shows the general trend in the number of formats per station for the top owner, across Metro markets. The average number of formats per station is about 0.8, implying that an owner with ten stations would generally have stations with eight different formats. The figure indicates that there is no general trend towards more format concentration.

Rather than concentrating on particular formats, these owners are choosing to operate stations with a variety of formats. A variety of formats may allow the owner to appeal to more advertisers, and in particular to the advertiser who wants to reach a variety of different audiences. This may be economically efficient. If advertisers could purchase all the different types of radio advertising they need from just one owner, then they could each save the cost of contracting with additional owners.

4. Radio Industry Financial Performance

The financial performance of the radio industry is important for at least two reasons. First, the financial performance of an industry may reflect changes in the structure of an industry and the conduct of its participants. Second, the financial performance of an industry is critical to the ability of that industry to attract new funding to finance its operations and growth. We have calculated several financial performance measures in order to shed light on these two considerations.

However, before discussing the implications of the different financial ratios we calculated, we spell out certain assumptions used in our analyses. First, we used Standard & Poor's Compustat database to obtain data on all publicly traded companies whose primary SIC code, or industry classification, was radio broadcasting (SIC 4832).[17] Using this criteria, we collected quarterly data and calculated financial ratios for 18 companies that represented over 700 stations and more than 33 percent of total reported radio industry revenues.[18] Thus, most of the companies included on our list are larger group owners, and therefore may not reflect the performance of smaller owners (i.e., owners of two or fewer stations).

To give perspective to the calculated financial ratios, we calculated similar ratios for the S&P 500 companies.[19] We then compare the median value of the calculated financial ratios for radio companies to the median value of the same ratios for the S&P 500 companies. We use the median, rather than the average, as financial ratios are rarely normally distributed and we do not

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[17] Standard & Poor's produces an electronic database of financial information on over 20,000 public compa , over more than 20 years. SIC denotes Standard Industrial Classification. This is a coding scheme for classifying firms according to industry developed and maintained by the U.S. Department of Commerce.

[18] The number of stations owned and percentage of radio industry revenues were calculated based on data in the BIA Radio database, February, 1997.

[19] S&P chooses 500 of the largest publicly-traded companies which are intended to represent a broad index of common stocks covering most sectors of the economy. The performance of the S&P 500 companies is a good measure of overall stock market performance. It is similar to, but has a broader selection of companies than, the Dow Jones Industrial Average.

want outliers (i.e., unusually high or low values) to distort the analysis.[20] We use the S&P 500 companies to create our benchmark financial ratios as the S&P 500 is typically thought of representing the "market".[21] Thus, the use of S&P 500 companies to create benchmark ratios reflects an effort to create benchmarks based upon a broad swath of companies.[22]

With the above presumptions in mind, we now turn to an analysis of the financial performance of the radio industry. We conduct this analysis ratio by ratio, with attention first given to ratios that reflect more on the operating performance of radio companies and then later on their financing.

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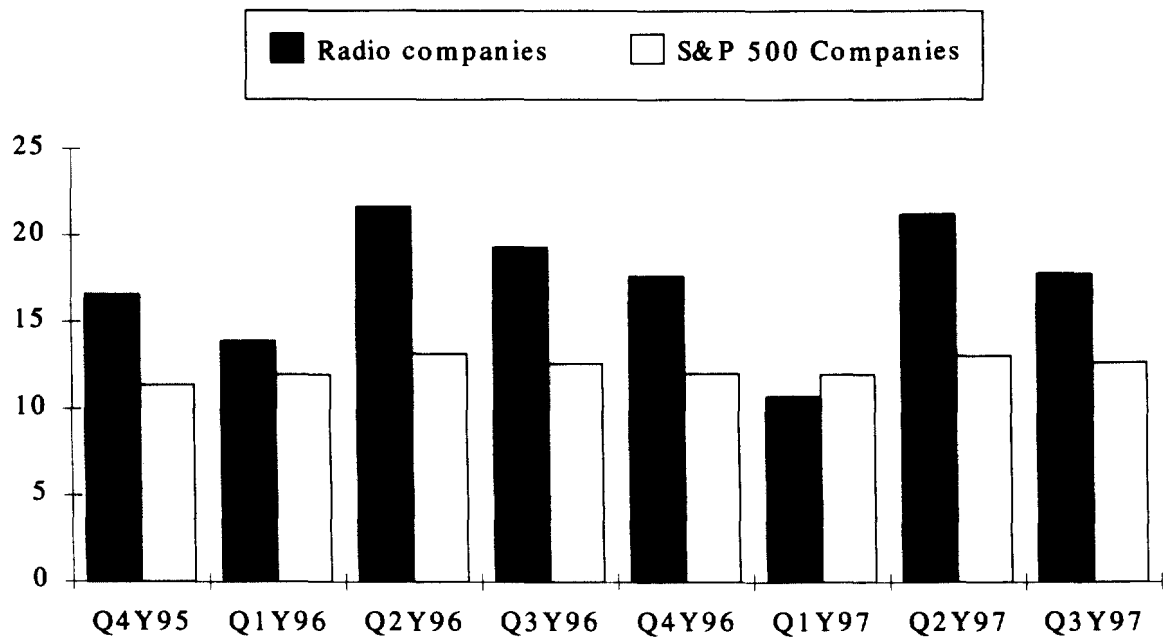
[20] The median is typically used in statistics in preference to the mean as a measure of central tendency for non-normal distributions. Further it is more robust to variations in the number of included observations. This is important because a number of companies we followed were acquired during our analysis period and so the number of ratios we are able to compute varies over time. We start with 18, but end with 12.

[21] Because financial ratios are typically ratios of dollars, they are unitless and are difficult to interpret except in comparison to some benchmark ratio. Consequently the choice of a benchmark is an important choice in financial analysis.

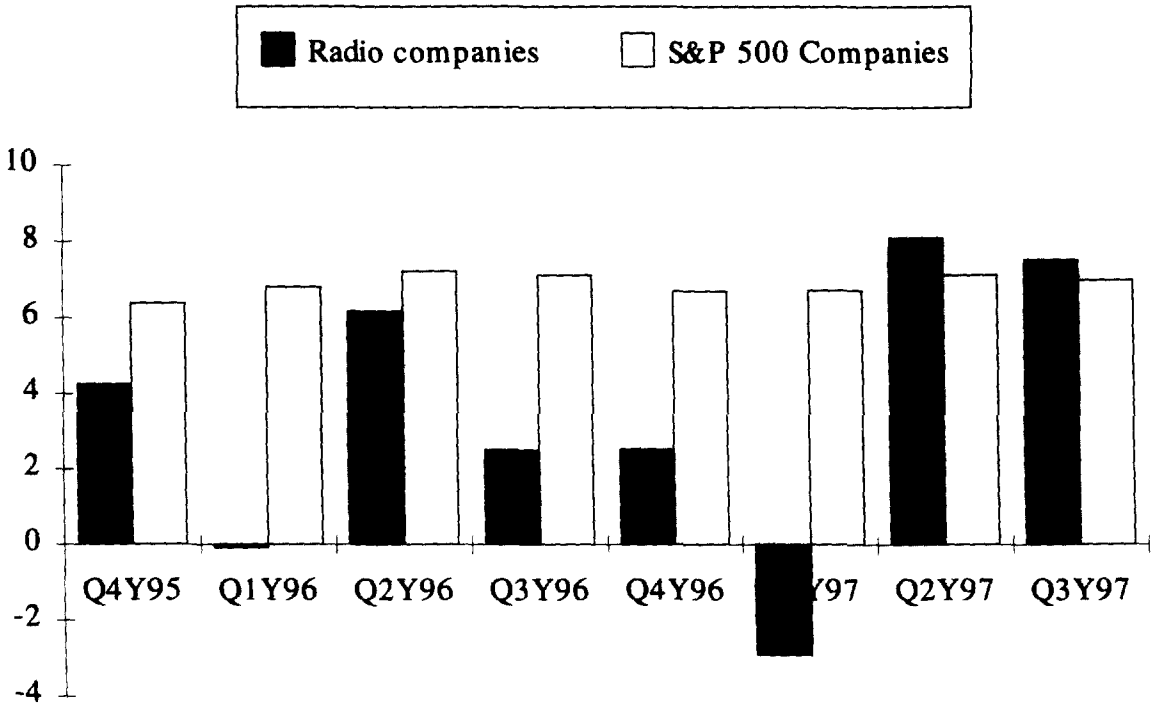
[22] Typically when analysts refer to movements in the stock "market", they use information on movement in the stock prices of the S&P 500. Thus, the S&P 500 firms represent firms doing business in just about every segment of private enterprise.

4.1 EBIT Margins



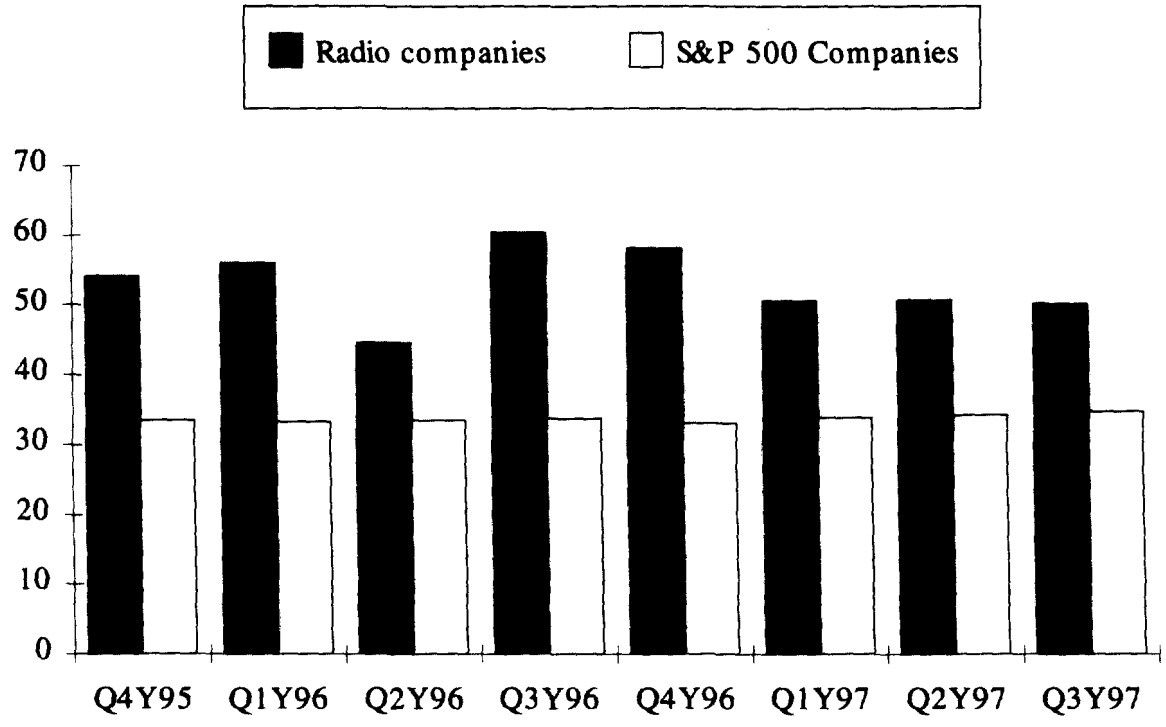
The earnings before interest and taxes margin, EBIT Margin, is defined as the ratio of a firm's earnings before interest and taxes to the firm's sales. As such, this ratio represents the gross profit margin of a company, or what it grosses per dollar of sales. From this view, the above figure suggests that the quarterly gross profit margins of publicly-traded broadcast radio companies have been greater than other publicly-traded companies in general. Further, the gross profit margins of these radio companies do not seem to have dramatically changed since passage of the Telecom Act at the end of the first quarter of 1996.

4.2 Net Profit Margins



The Net Profit Margin is defined as the ratio of a firm's net income to its sales. Thus, the Net Profit Margin represents what a company nets per dollar of sales and is an adjustment of the EBIT Margin for interest and taxes. Comparing the figure for EBIT Margins to the figure for Net Profit Margins suggests that while these radio companies are grossing more than the typical public company, they are netting less than the typical public company. This relationship could occur because radio companies are either paying more in taxes than other firms (e.g., older assets, less depreciation expense) or they are paying more in interest than other firms (e.g., use more debt to finance operations). To address this question, we turn to an examination of radio companies' debt loads.

4.3 Total Debt as a Percentage of Total Capital



Total debt as a percentage of total capital represents a measure of a firm's debt load.[23] The above figure suggests that sampled radio companies tend to use more debt than the typical S&P 500 company does to finance its operations. Consequently, a plausible explanation of radio companies' lower net profit margins is that they are paying more in interest due to higher debt loads than the typical S&P 500 firm does.

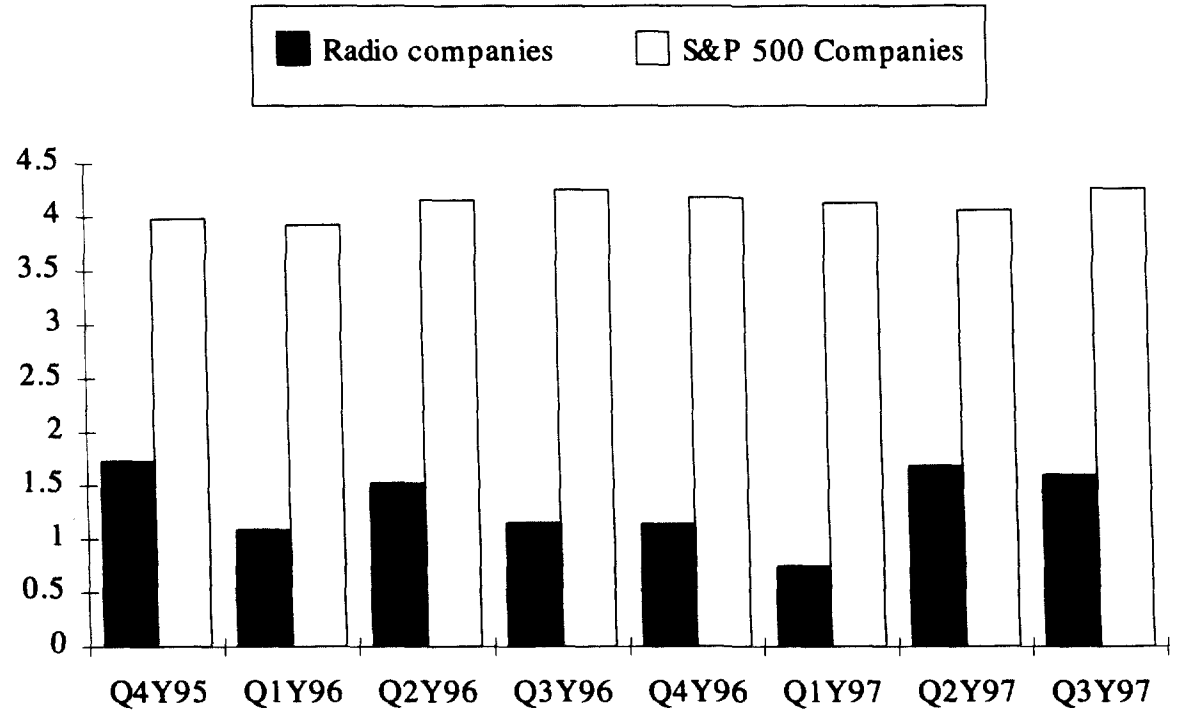
Two issues arise from the above evidence. First, this evidence raises concerns about the ability of radio companies to compete vigorously with one another. Recent research suggests that firms with a higher percentage of debt tend to charge higher prices and compete less vigorously

[23] We measure this percentage as a moving average of a firm's level of total debt and total invested capital (debt and equity) over the prior four quarters. A four quarter moving average is simply an average of the prior four quarters, where prior is determined by what is considered the current quarter.

than firms with a lower percentage of debt.[24] Further, research also suggests that an industry's general level of leverage is an indicator of its greater concentration and potentially less vigorous competition.[25]

Second, the above evidence raises a concern about the ability of radio companies to meet their requisite interest payments, particularly during periods of general economic distress. To address this issue we now turn to a consideration of another financial ratio.

4.4 Fixed Charge Coverage After Taxes



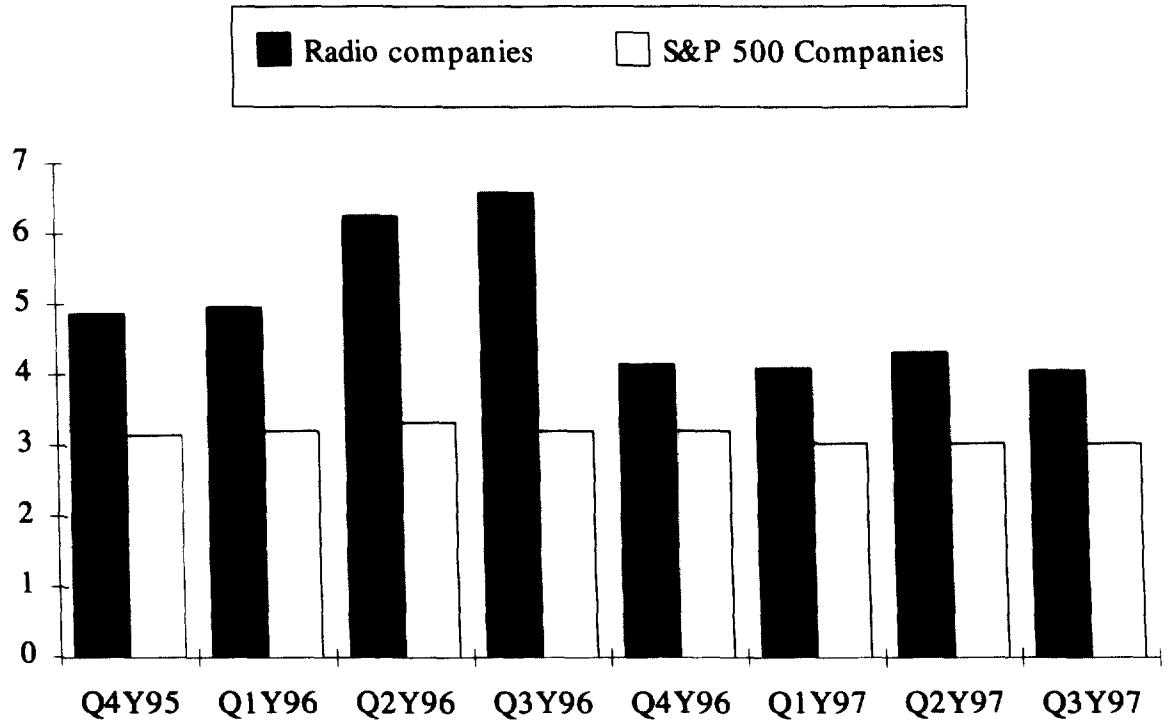
Fixed charge coverage after taxes is a measure of a firm's ability to pay interest and other

[24] Judith A Chevalier, "Capital Structure and Product-Market Competition: Empirical Evidence from the Supermarket Industry", *American Economic Review* 85 (1995), 415-435. Judith A. Chevalier, "Do LBO Supermarkets Charge More? An Empirical Analysis of the Effects of LBOs on Supermarket Pricing", *Journal of Finance* 50 (1995), 1095-1110.

[25] Gordon M. Phillips, "Increased debt and industry product markets: An empirical analysis", *Journal of Financial Economics* 37 (1995), 189-238.

fixed charges out of operating cash flow. We measure it as the ratio of quarterly net income (before extraordinary items) plus interest expense to interest expense. Thus we are able to gain a sense of radio companies ability to manage their debt load. While not generating the same level of cash flows to interest expense as other companies, radio companies are generating enough cash flow to meet their interest obligations and so we see no reason, at this time, to be concerned about their relatively greater debt loads.

4.5 Market to Book Ratio



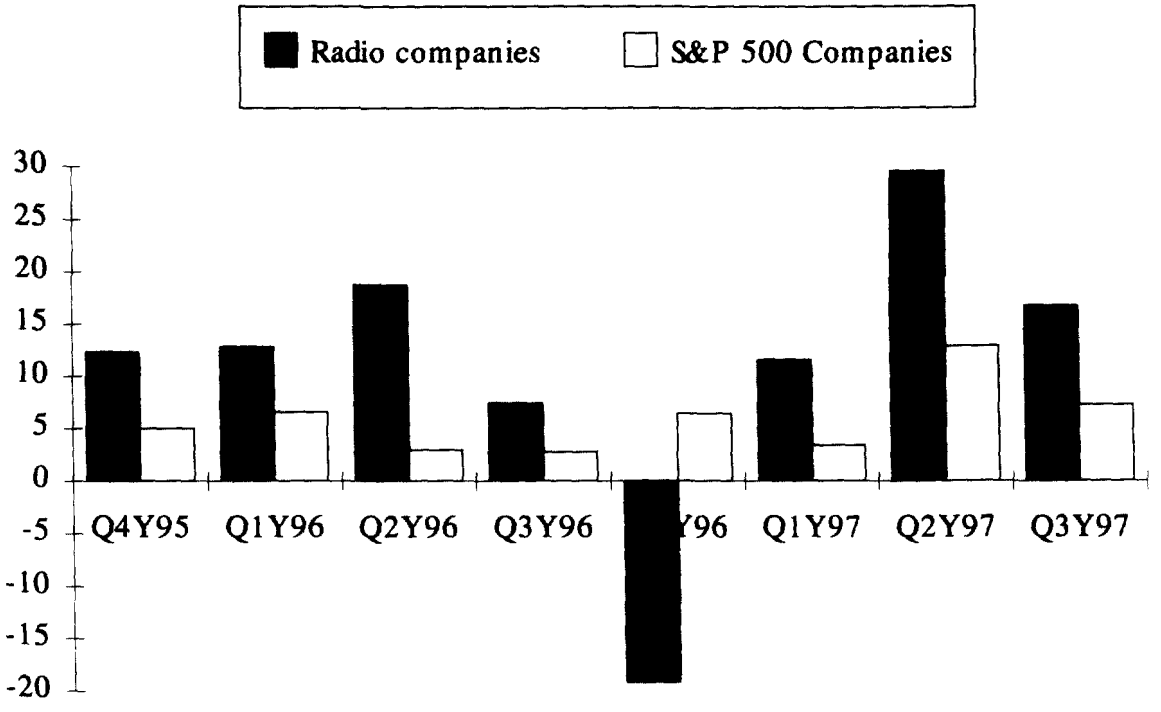
Another dimension of a company's ability to finance its operations is its future prospects. The market to book ratio, which is defined as the ratio of a firm's market value of equity to its book value of equity, is a useful measure of the market's assessment of that firm's future prospects. The greater a firm's market to book ratio, the higher the market is assessing that firm's future prospects.

Further, the market to book ratio is a good proxy for a firm's q ratio.[26] The q ratio is defined as the ratio of the financial market's valuation of the reproducible real assets of a firm to their replacement cost. Such a ratio has several interpretations. First, for values greater than one it signals that such firms are earning economic rents. Thus, it signals profitable investment opportunities within a firm or industry. From this perspective, we see that the above figure suggests that the market views the prospects of radio companies as being better than the typical S&P 500 firm. Second, for values greater than one, it may signal that the firm may not be facing vigorous competition.[27] Such an interpretation would be consistent with one interpretation of the debt load evidence.

[26] N. Varaiya, R. Kerin, and D. Weeks, "The Relationship between growth, profitability, and firm value", *Strategic Management Journal* 8 (1987), 487-497.

[27] E. Lindenberg and S. Ross, "Tobin's q Ratio and Industrial Organization", *Journal of Business* 54 (1981), 1-32. W. Marshall, "Tobin's q and the Structure-Performance Relationship", *American Economic Review* 74 (1984), 1051-1060.

4.6 Stock Market Returns



Altogether the above evidence suggests that this segment of the radio industry is enjoying robust health and excellent future prospects. These inferences should be reflected in their stock returns. To test this point, we calculate the quarterly stock returns of the different companies by including their cash dividends in the return calculation.[28] Thus, the return measure shown in this figure reflects more than simple stock price appreciation. We report the median quarterly stock returns of the two groups of companies in the above figure. This figure suggests that while the typical radio company's returns have varied more than the typical S&P 500 company returns have varied, radio company stocks are doing relatively well.[29] Such an interpretation is consistent with

[28] Specifically, we compute: {ending share price + dividends per share}/ {beginning share price}x 100, which is equal to price appreciation plus dividend yield.

[29] There was a systematic drop in the share prices of public radio companies in the 4th quarter of 1996, which research suggests was related to the market's concerns over the Department of Justice's examination of

recently reported evidence in *Broadcasting & Cable*.[30] Over 1997, the Bloomberg/Broadcast & Cable radio index was up 107%, while the S&P 500 index was up 31%.[31] Clearly investors view the Telecom Act's relaxation of radio ownership limits as improving the future prospects of the radio industry since much of this price appreciation is ascribed by industry observers to the radio industry's drive toward to consolidation.[32]

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several large radio mergers. As DOJ did not block the mergers, share prices rebounded and c[illegible]erns over DOJ blocking future mergers lessened.

[30] Higgins, J., "TV, radio stocks take wild ride", Broadcasting & Cable (January 5, 1998), pp. 16-17.

[31] The Bloomberg/Broadcast & Cable radio index is an index of the stock prices of radio companies created by the financial data service, Bloomberg, for *Broadcast & Cable* magazine.

[32] Higgins, op.cit., p. 16. Also Veronis, Suhler & Associates, "Veronis Suhler & Associates Communications Industry Report", 15th Annual Edition (October, 1997), p. 92.

			All Owners			Owners with 3 or More Stations					Owner with highest Revenue				Revenue Concentration Measures		
Radio Metro	Date	Rank	# Stations	# Owners	# Formats	# Stations	# Owners	# Formats	Aud. Share	Rev. Share	# Stations	Owner	# Formats	Aud. Share	Rev. Share	HHI	Change in HHI	CR4
Green Bay, WI	Mar-96	181	8	5	5	3	1	2	35.0	57.6	3	Midwest Communications Inc	2	35.0	57.6	4,047		94.9
	Nov-97	181	10	6	6	4	1	3	32.3	62.1	4	Midwest Communications Inc	3	32.3	62.1	4,748	701	99.0
Cape Cod, MA	Mar-96	183	14	8	6	6	2	2	24.7	45.9	3	Radio Hyannis	2	15.7	31.1	1,844		78.6
	Nov-97	182	14	8	9	7	2	5	39.2	66.8	4	Boch Broadcasting LP	4	15.9	34.6	2,577	733	88.5
Terre Haute, IN	Mar-96	180	19	13	9	3	1	2	12.8	18.9	2	Wabash Valley Broadcasting	2	28.8	34.5	2,026		77.9
	Nov-97	183	22	14	11	6	2	4	19.4	27.0	2	Wabash Valley Broadcasting	2	35.4	32.7	1,945	-81	77.5
Santa Barbara, CA	Mar-96	184	13	8	9	3	1	3	18.7	36.3	3	Criterion Media Group	3	18.7	36.3	2,147		80.0
	Nov-97	184	13	7	9	7	2	6	38.8	70.1	4	Jacor Communications Incorporated	4	21.1	39.1	2,718	571	88.5
Myrtle Beach, SC	Mar-96	185	23	17	11	0	0		0.0	0.0	2	Pinnacle Broadcasting Co	2	12.9	15.9	995		52.7
	Nov-97	185	27	13	14	15	4	8	51.2	70.8	5	Root Communications Ltd	3	20.0	28.6	2,011	1,016	85.4
Chico, CA	Mar-96	187	16	9	9	3	1	3	17.2	35.0	3	Park Lane Group	3	17.2	35.0	2,099		80.8
	Nov-97	186	17	6	9	12	3	6	62.0	92.4	3	Regent Communications	3	20.1	35.7	2,934	835	96.7
Yakima, WA	Mar-96	186	16	7	8	9	3	5	56.5	71.9	3	Ingstad, Tom	3	22.8	35.7	2,524		90.4
	Nov-97	187	17	6	9	13	3	7	71.5	85.6	5	Ingstad, Tom	5	41.7	49.7	3,461	937	97.9
Merced, CA	Mar-96	188	11	9	8	0	0		0.0	0.0	2	Merced Radio Partners	2	10.9	32.8	1,753		71.9
	Nov-97	188	15	9	9	6	2	5	20.0	55.9	3	Merced Radio Partners	3	12.7	38.2	2,928	1,175	98.5
Amarillo, TX	Mar-96	189	21	12	11	6	2	5	27.3	27.5	2	Morris Communications Corp	2	22.8	35.9	1,951		71.8
	Nov-97	189	21	13	11	7	2	3	34.0	33.3	2	Morris Communications Corp	2	24.0	34.9	2,076	125	78.0
Waco, TX	Mar-96	190	10	7	8	0	0		0.0	0.0	2	Sonance Communications Inc	1	18.9	32.1	2,157		88.1
	Nov-97	190	11	5	8	6	1	4	51.2	88.9	6	Capstar Broadcasting Partners	4	51.2	88.9	7,954	5,797	100.0
Danbury, CT	Mar-96	191	6	3	4	0	0		0.0	0.0	2	Berkshire Broadcasting Corp	2	21.2	43.4	3,674		89.5
	Nov-97	191	6	2	5	6	2	5	34.4	100.0	3	Atlantic Star	3	11.6	51.3	5,003	1,329	100.0
Springfield, IL	Mar-96	192	12	5	7	9	3	6	63.2	72.7	3	Mid-West Family Broadcast Group	3	26.0	27.3	2,521		100.0
	Nov-97	192	13	4	8	12	3	7	79.8	100.0	6	Saga Communications LP	5	39.7	50.0	3,791	1,270	100.0
Manchester, NH	Mar-96	193	12	9	9	0	0		0.0	0.0	2	Knight Quality Stations	2	16.1	50.5	4,506		100.0
	Nov-97	193	12	7	8	6	2	4	23.8	45.2	2	Capstar Broadcasting Partners	2	17.0	54.8	5,046	540	100.0
Elmira-Corning, NY	Mar-96	194	21	9	9	12	3	6	51.4	77.7	5	Pembrook Pines Inc	4	20.2	30.9	2,336		89.1
	Nov-97	194	22	10	10	12	3	7	43.6	75.0	3	Sabre Communications Inc	3	17.0	31.3	2,333	-4	88.5
Northwest Michigan	Mar-96	195	24	12	9	14	4	6	60.9	70.7	3	Midwestern Broadcasting Company	2	24.9	26.4	1,725		76.4
	Nov-97	195	26	8	11	22	4	9	77.4	93.1	5	Midwestern Broadcasting Company	4	34.8	36.2	2,596	871	93.1
Santa Maria-Lompoc, CA	Nov-97	196	13	9	7	0	0		0.0		2	Bayliss Broadcasting Co	2	0.0			0	
Florence, SC	Mar-96	196	20	9	10	11	3	6	24.4	51.0	2	Forjay Broadcasting	2	23.1	33.3	2,810		100.0
	Nov-97	197	18	7	10	12	3	8	26.5	51.0	2	Forjay Broadcasting	2	26.1	27.6	2,214	-597	91.6
Cedar Rapids, IA	Mar-96	197	11	6	8	3	1	3	28.7	33.6	2	Palmer Communications Inc	2	23.1	35.5	2,810		95.3
	Nov-97	198	11	4	8	9	2	7	72.1	94.9	4	Jacor Communications Incorporated	4	30.1	48.1	4,517	1,707	99.7
Frederick, MD	Mar-96	199	7	5	6	0	0		0.0	0.0	2	Gibbons, James L	2	27.0	67.8	5,105		99.1
	Nov-97	199	8	6	6	0	0		0.0	0.0	2	Gibbons, James L	2	27.2	66.0	4,966	-139	100.0
Alexandria, LA	Mar-96	198	17	12	9	3	1	2	8.9	16.9	2	KDBS Inc	1	20.0	22.0	1,521		71.2
	Nov-97	200	16	12	9	3	1	3	26.1	33.9	3	Champion Broadcasting Corporation	3	26.1	33.9	1,813	292	73.4
Richland-Kennewick-Pasco, WA	Mar-96	200	14	8	8	7	2	3	44.2	69.8	3	Deschutes River Broadcasting Inc	2	28.4	37.7	2,758		93.4
	Nov-97	201	17	8	11	9	2	6	65.5	86.4	4	Deschutes River Broadcasting Inc	4	34.1	45.8	3,933	1,175	100.0
Medford-Ashland, OR	Mar-96	201	16	9	10	4	1	3	23.9	31.5	4	Johnson Communications	3	23.9	31.5	2,617		94.4
	Nov-97	202	17	7	9	13	3	8	78.2	95.5	6	Deschutes River Broadcasting Inc	5	40.2	49.1	3,882	1,264	95.5
Lake Charles, LA	Mar-96	202	10	6	7	3	1	3	40.3	46.4	3	LA Media Interests	3	40.3	46.4	2,834		87.3
	Nov-97	203	10	5	6	4	1	4	47.4	60.5	4	LA Media Interests	4	47.4	60.5	4,106	1,272	95.5
Laurel-Hattiesburg, MS	Mar-96	204	18	12	7	3	1	3	25.1	41.9	3	Blakeney Communications Inc	3	25.1	41.9	2,458		81.4
	Nov-97	204	18	12	9	3	1	3	26.9	44.4	3	Blakeney Communications Inc	3	26.9	44.4	2,497	39	78.9
Marion-Carbondale, IL	Mar-96	203	18	13	7	3	1	2	23.3	35.2	3	3-D Communications	2	23.3	35.2	2,190		85.2
	Nov-97	205	19	8	8	12	2	6	71.5	90.5	7	Zimmer Enterprises	5	40.7	50.9	4,185	1,995	96.7
Ft. Walton Beach, FL	Mar-96	206	15	12	10	3	1	3	29.0	51.1	3	Holladay Broadcasting	3	29.0	51.1	3,084		84.4
	Nov-97	206	14	9	9	4	1	4	38.5	57.3	4	Holladay Broadcasting	4	38.5	57.3	3,992	908	93.3
Blacksburg-Christiansburg-Radford-Pulaski	Nov-97	207	15	7	7	9	1	5	30.6	87.5	9	Bocephus Broadcasting	5	30.6	87.5	7,724	7,724	99.0
Fargo, ND - Moorhead, MN	Mar-96	208	13	8	8	0	0		0.0	0.0	2	Minnesota-Dakota Co	1	20.8	31.1	2,051		83.9
	Nov-97	208	14	6	9	9	2	6	62.8	72.4	6	MSB Inc	5	47.3	56.3	3,811	1,760	99.5
Sioux Falls, SD	Mar-96	210	16	9	8	6	2	4	27.4	36.3	2	Midcontinent Media	1	19.1	23.8	1,714		76.8
	Nov-97	209	16	5	9	11	2	7	77.6	93.3	5	Midcontinent Media	5	40.6	50.6	4,430	2,716	100.0
Redding, CA	Mar-96	207	15	11	7	0	0		0.0	0.0	2	Park Lane Group	2	25.5	33.3	2,528		91.1
	Nov-97	210	13	5	7	9	2	5	72.3	99.2	6	Regent Communications	4	40.7	57.5	5,042	2,514	99.2

			All Owners			Owners with 3 or More Stations					Owner with highest Revenue					Revenue Concentration Measures		
									Aud.					Aud.			Change in	
Radio Metro	Date	Rank	# Stations	# Owners	# Formats	# Stations	# Owners	# Formats	Share	Rev Share	# Stations	Owner	# Formats	Share	Rev Share	HHI	HHI	CR4
Laredo, TX	Mar-96	215	8	5	5	0	0		0.0		1	Alderete Communications	1	7.5				
	Nov-97	211	8	6	4	0	0		0.0		1	Alderete Communications	1	11.6			0	
Champaign, IL	Mar-96	205	12	10	7	0	0		0.0	0.0	2	Saga Communications LP	2	25.2	44.5	2,640		85.7
	Nov-97	212	14	11	8	0	0		0.0	0.0	2	Saga Communications LP	2	26.9	46.5	2,759	119	85.1
Tuscaloosa, AL	Mar-96	211	15	8	7	4	1	3	7.7	22.0	1	Athens Broadcasting Company	1	15.9	34.8	2,205		85.0
	Nov-97	213	13	7	8	7	2	6	53.4	74.5	4	Southern Star	4	31.2	50.0	3,394	1,190	93.9
St. Cloud, MN	Mar-96	213	16	6	10	11	3	8	55.2	92.3	3	WJON Broadcasting Co	3	25.5	41.7	3,196		99.4
	Nov-97	214	15	5	11	12	3	9	57.4	90.4	4	WJON Broadcasting Co	4	24.6	38.8	2,919	-277	99.4
Duluth, MN - Superior, WI	Mar-96	209	22	9	10	13	4	7	42.2	20.3	2	Shockley Communications Corp	2	24.0	34.1	1,449		60.0
	Nov-97	215	25	11	11	12	3	9	65.1	86.4	6	Shockley Communications Corp	5	43.5	56.1	4,045	2,596	98.5
Wheeling, WV	Mar-96	212	14	6	9	11	3	6	80.5	95.0	5	Osborn Communications Corp	4	52.9	66.0	4,781		95.0
	Nov-97	216	14	6	11	10	2	6	83.8	93.9	7	Southern Star	5	61.6	74.6	5,934	1,153	95.3
Dubuque, IA	Mar-96	214	13	8	7	0	0		0.0	0.0	2	Woodward Communications Inc	2	17.7	30.6	2,325		89.4
	Nov-97	217	13	7	6	4	1	4	23.6	44.9	4	Cumulus Media LLC	4	23.6	44.9	3,345	1,020	92.6
Parkersburg-Marietta, WV-OH	Mar-96	216	13	7	8	6	2	3	61.9	76.0	3	Fritz Communications Inc	2	38.0	41.5	3,078		92.1
	Nov-97	218	15	7	9	6	2	4	65.3	71.9	3	Burbach Broadcasting Group	3	35.2	37.0	2,863	-215	94.1
Winchester, VA	Nov-97	219	13	6	5	7	2	4	45.6	83.9	4	Mid Atlantic Network	3	17.0	44.1	3,651	3,651	99.2
Lima, OH	Mar-96	217	10	7	6	0	0		0.0	0.0	2	Lima Broadcasting Co	2	27.5	38.8	2,500		84.7
	Nov-97	220	10	5	7	7	2	7	58.8	96.9	3	Jacor Communications Incorporated	3	33.9	54.1	4,771	2,271	100.0
Burlington, VT	Mar-96	219	20	14	10	3	1	3	24.1	26.6	1	SBC Technologies Inc	1	0.5	41.3	3,732		112.0
	Nov-97	221	18	12	11	3	1	3	27.8	29.8	3	Hall Communications	3	27.8	29.8	1,980	-1,752	84.6
Charlottesville, VA	Mar-96	220	12	7	8	6	2	5	37.4	65.5	3	Charlottesville Broadcast	3	23.3	37.9	3,116		97.4
	Nov-97	222	12	5	7	7	2	5	40.6	67.7	4	Clark Broadcasting Enterprises	3	17.7	34.7	2,806	-310	99.2
Abilene, TX	Mar-96	218	15	10	9	3	1	3	12.8	23.1	2	SunGroup Inc	1	40.6	43.1	2,756		91.4
	Nov-97	223	15	6	9	9	2	6	51.4	59.6	6	Dynamic Broadcasting Company	5	29.4	37.9	3,133	378	97.0
Joplin, MO	Mar-96	222	18	9	9	6	2	4	39.0	26.0	2	American Media Investments Inc	1	3.8	25.0	1,575		74.0
	Nov-97	224	18	9	8	7	2	5	56.6	51.0	4	Zimmer Enterprises	3	49.6	40.4	2,750	1,175	88.1
Waterloo-Cedar Falls, IA	Mar-9	221	13	8	10	3	1	2	22.7	36.4	3	Independence Broadcasting	2	22.7	36.4	2,576		94.5
	Nov-9;	225	14	6	9	8	2	6	70.6	94.8	4	Connoisseur Communications	3	36.0	51.7	4,552	1,976	99.1
Panama City, FL	Mar-96	223	16	9	10	3	1	3	19.6	15.5	2	Southern Broadcasting Companies	2	17.9	30.2	1,917		79.3
	Nov-97	226	16	8	9	9	2	6	64.3	78.1	4	Root Communications Ltd	4	34.5	42.2	3,297	1,380	96.9
Monroe, LA	Mar-96	224	16	10	8	4	1	3	42.7	41.3	4	New South Communications Inc	3	42.7	41.3	2,701		91.6
	Nov-97	227	17	10	8	7	2	5	64.2	62.2	4	New South Communications Inc	3	39.9	39.5	2,671	-29	94.2
Bloomington, IL	Mar-96	225	4	3	4	0	0		0.0	0.0	2	Bloomington Broadcasting	2	36.3	63.6	4,766		99.2
	Nov-97	228	4	2	4	3	1	3	50.0	86.4	3	Bloomington Broadcasting	3	50.0	86.4	7,645	2,878	100.0
Eau Claire, WI	Mar-96	226	14	7	9	3	1	3	19.3	18.0	2	Nelson, David, et al	2	24.9	27.0	1,979		84.4
	Nov-97	229	14	5	11	9	2	7	74.5	84.1	5	Nelson, David, et al	5	46.1	43.9	3,640	1,661	97.0
Battle Creek, MI	Mar-96	227	6	3	4	4	1	3	23.9	100.0	4	Patterson Broadcasting	3	23.9	100.0	10,000		100.0
	Nov-97	230	5	2	5	4	1	4	18.9	100.0	4	Capstar Broadcasting Partners	4	18.9	100.0	10,000	0	100.0
Lafayette, IN	Mar-96	228	13	8	7	3	1	2	26.2	46.8	3	Schurz Communications Inc	2	26.2	46.8	2,887		91.3
	Nov-97	231	12	8	9	3	1	3	27.7	46.3	3	Schurz Communications Inc	3	27.7	46.3	2,812	-75	89.6
Sussex, NJ	Nov-97	232	3	1	3	3	1	3	0.0		3	Nassau Broadcasting Partners LP	3	0.0			0	
Santa Fe, NM	Mar-96	230	11	7	8	0	0		0.0	0.0	2	Plaza Broadcasting Inc	2	5.4	28.1	1,820		75.9
	Nov-97	233	9	6	6	3	1	3	5.3	25.0	3	Withers Broadcasting Company	3	5.3	25.0	1,072	-748	56.8
State College, PA	Mar-96	229	9	6	6	0	0		0.0	0.0	2	Tele-Media Broadcasting Company	2	13.4	32.6	2,511		93.0
	Nov-97	234	9	4	6	4	1	4	20.7	38.6	4	Citadel Communications Corporation	4	20.7	38.6	2,583	72	90.9
Bryan-College Station, TX	Mar-96	231	13	9	8	3	1	2	19.4	37.6	3	Gulfstar Communications Inc	2	19.4	37.6	2,339		82.2
	Nov-97	235	13	8	9	6	2	4	44.1	61.8	3	Capstar Broadcasting Partners	2	21.7	35.8	2,278	-61	84.6
Altoona, PA	Mar-96	232	13	8	9	3	1	2	33.4	38.1	3	Logan Broadcasting Inc	2	33.4	38.1	2,308		83.8
	Nov-97	236	15	8	10	5	1	4	48.8	64.0	5	Forever Broadcasting Incorporated	4	48.8	64.0	4,530	2,222	94.8
Wichita Falls, TX	Mar-96	233	8	5	6	0	0		0.0	0.0	2	Beard, Sam & Pamela	1	22.5	33.3	2,349		92.2
	Nov-97	237	8	3	5	7	2	4	75.1	98.2	4	Apex Broadcasting LLC	4	47.2	59.1	5,023	2,674	100.0
Pueblo, CO	Mar-96	234	11	7	7	3	1	3	11.6	20.5	2	McCoy Broadcasting	2	29.8	67.9	5,095		98.7
	Nov-97	238	10	5	6	6	2	5	21.6	41.7	2	McCoy Broadcasting Co	2	25.9	53.6	3,861	-1,234	97.1
Columbia, MO	Mar-96	235	15	11	7	3	1	1	23.0	33.1	3	Zimmer Enterprises	1	23.0	33.1	1,955		80.5
	Nov-97	239	17	8	9	10	2	5	68.4	83.8	4	Columbia AM Inc	1	29.6	46.2	3,712	1,758	99.2
Billings, MT	Mar-96	236	15	8	7	9	3	5	81.3	91.7	3	Deschutes River Broadcasting Inc	2	34.4	46.3	3,279		97.2
	Nov-97	240	14	6	8	11	3	7	85.0	100.0	5	Deschutes River Broadcasting Inc	4	43.8	58.6	4,388	1,108	100.0